

Sanctuary Ocean Count Project

Volunteer Training

Hawaiian Islands Humpback Whale
National Marine Sanctuary

National Marine Sanctuary Program

- 13 designated National Marine Sanctuaries
- Protects over 18,000 sq. miles of aquatic ecosystems
- Sanctuaries range from Stellwagen Bank, Massachusetts to Fagatele Bay, American Samoa
- Freshwater sanctuary in Thunder Bay, Michigan

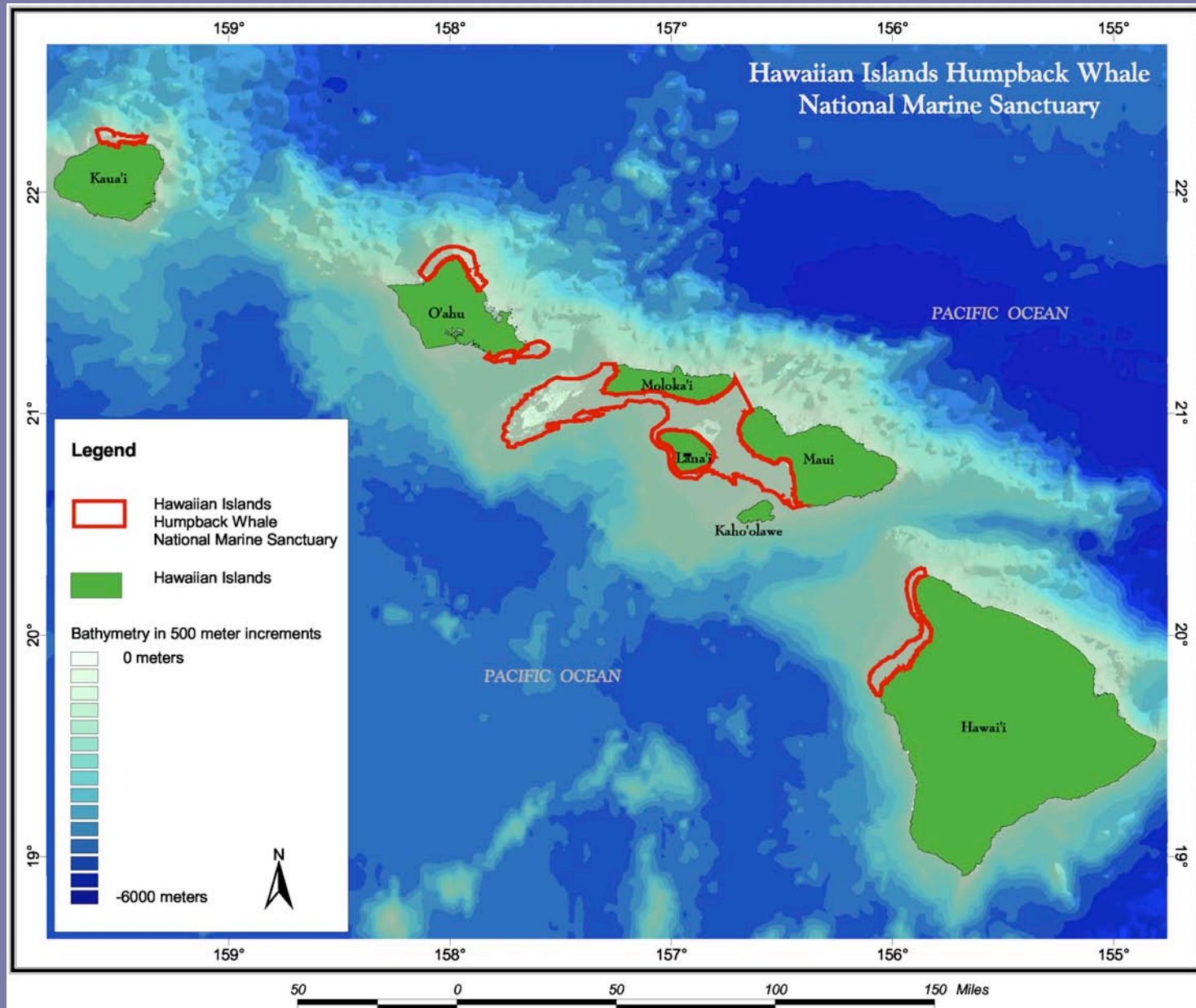


Hawaiian Islands Humpback Whale National Marine Sanctuary

- Congressionally designated by the Hawaiian Islands National Marine Sanctuary Act on November 4, 1992
- Sanctuary management plan and regulations became effective in June 1997 and in August of 2002 Governor Cayetano reapproved the Sanctuary for another five years
- Joint partnership with State of Hawai'i
- 1,400 sq. miles of ocean adjacent to the Hawaiian Islands

Sanctuary Mission: To protect the humpback whale and its habitat through the use of education, research and interpretive enforcement

Sanctuary Boundaries



The Hawaiian Islands are the primary breeding, calving and nursing grounds for the North Pacific stock of humpback whales

Status of Humpbacks in Hawai'i

- Population appears to be increasing (~ 7% per year)
- Approx. 5,000 whales migrate from Alaska to Hawai'i every winter to breed and raise their young
- Whale-watching continues to be an important, environmentally-sustainable economic activity (~\$20 M in annual revenues)
- Continued Threats - Still listed as an endangered species
 - Marine debris
 - Degraded water quality
 - Underwater noise
 - Vessel strikes

Sanctuary Ocean Count Project

Big Island · Kauaʻi · Oʻahu · Kahoʻolawe

- Shore-based census
 - Started on Oahu in 1996 (currently 25 official sites)
 - Big Island added in 1999 (currently 20 official sites)
 - Kauaʻi added in 2000 (currently 16 official sites)
 - Kahoʻolawe added in 2002
- To date, 56 sites and 2000+ volunteers
- All sites are fairly evenly distributed along the coastlines of each island (maps of each island, with sites notated, can be viewed on our website's Sanctuary Ocean Count page - http://www.hawaiihumpbackwhale.noaa.gov/volunteer_program/ocean_count.html)

Sanctuary Ocean Count Project

Big Island · Kauaʻi · Oʻahu · Kahoʻolawe

1. Call the Sanctuary office to register – Have a site in mind when you call (site listing can be found on the Sanctuary Ocean Count website)
2. Once registered you will be given the contact Site Leader's name and phone # for your site
3. Call your contact Site Leader one week prior to the Count date
4. Meet promptly at your site in the designated area at the specified meeting time (usually 7 a.m.)
5. Read the Notice of Caution, sign-in and get instructions from Site Leaders
6. Conduct the Count 8:00 a.m. through 12:00 p.m.

Data Forms

- **Behavior Sheet (time increment = 30 min.)**

- Work in teams of two – one scans water and calls out behaviors as seen, the other logs down the data
- Log the actual numbers of adults and calves seen in the 30 min.
- Log the # of each behavior seen during the 30 min.

- **Visibility side of Behavior Sheet (time increment = ~1 hour)**

- Estimate and log the severity of fog, foam, rain, swells and wind to the best of your ability

- **Site Map (time increment = 10:30-11:00 a.m. ONLY)**

- Site Leader will designate 2 volunteers and explain this task to them

Behavior Sheet (Sample pg. 1)

SANCTUARY OCEAN COUNT BEHAVIOR SHEET (SAMPLE)

Name: _____

Island: _____

Address: _____

Site # / Name: _____

Phone: _____

Date: _____

E-Mail: _____

Start Time: _____

End Time: _____

Observe humpback whale activity at your site:

Time	Number of Adults	Number of Calves	Breach	Slap (Pectoral fin, Fluke, Head)	Blow	Fluke Up Dive
0800-0830	2	1	7	2	0	1
0831-0900	2	1	0	5	0	1
0901-0930	3	1	0	10	0	2
0931-1000	3	1	15	3	0	3
1001-1030	2	0	2	1	0	5
1031-1100	4	2	3	0	1	2
1101-1130	10	2	0	0	2	8
1131-1200	1	0	1	7	0	3

Behaviors
to log

Describe the behavior if none of the above is occurring (Are the whales moving out of the area? Are they diving for long periods of time?):

0942 – The 3 whales are a mother/calf/escort type of pod and the calf is performing most of the breaching. Mother is recalling the calf with tail slaps.
1022 – The previous group left the area and two whales arrived in separate pods. The main activity is prolonged dives. Not much time is spent at the surface.

1048 – Mother/calf/escort pod (3) plus mother/calf pod two miles apart. All whales are moving through the area.

1115 – Lots of whale activity. Most whales appear to be moving through. Long dives.

Behavior Sheet (Sample pg. 2)

SANCTUARY OCEAN COUNT BEHAVIOR SHEET (SAMPLE)

Date: _____ Island: _____ Site # / Name: _____ / _____

Name of Observer: _____

Visibility (use the scheme provided below to summarize visibility status for each hour)

CONTINUE WITH YOUR COMMENTS HERE

1. 0800-0900

Fog	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Heavy	Rain	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Heavy	Haze	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Heavy	Wind	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Strong
			Medium				Medium				Medium				Medium
			Light				Light				Light				Light
Foam	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Lots	Swell	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	High	Visibility Code _____							
			Some				Medium	(do not write here – code will be decided by data analyst)							
			None				Small/None								

2. 0901-1000

Fog	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Heavy	Rain	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Heavy	Haze	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Heavy	Wind	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Strong
			Medium				Medium				Medium				Medium
			Light				Light				Light				Light
Foam	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Lots	Swell	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	High	Visibility Code _____							
			Some				Medium	(do not write here – code will be decided by data analyst)							
			None				Small/None								

3. 1001-1100

Fog	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N	Heavy	Rain	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Heavy	Haze	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Heavy	Wind	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Strong
			Medium				Medium				Medium				Medium
			Light				Light				Light				Light
Foam	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Lots	Swell	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	High	Visibility Code _____							
			Some				Medium	(do not write here – code will be decided by data analyst)							
			None				Small/None								

4. 1101-1200

Fog	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N	Heavy	Rain	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Heavy	Haze	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Heavy	Wind	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Strong
			Medium				Medium				Medium				Medium
			Light				Light				Light				Light
Foam	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Lots	Swell	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	High	Visibility Code _____							
			Some				Medium	(do not write here – code will be decided by data analyst)							
			None				Small/None								

All whales in the area where in general moving through for the duration of the observations. On one occasion an escort from one 3 whale pod moved to another pod.

Please mail or deliver completed forms to the appropriate Sanctuary office.

Site Map

**SANCTUARY OCEAN COUNT
SITE MAP**

Date: _____ Island: _____

Site # / Name / Elevation: _____ / _____ / _____

Volunteer Name(s): _____

Visibility: Fog Y N Heavy Rain Y N Heavy Haze Y N Heavy Wind Y N Strong
Medium Medium Medium Medium Medium Medium Medium Medium
Light Light Light Light Light Light Light Light

Foam Y N Lots Swell Y N High Visibility Code _____
Some Medium (do not write in here – code will be decided by data
None Small/None analyst)

Observation Time: 1030 a.m. – 1100 a.m.
Draw a map of your site and specify your observation spot

Between **1030 and 1100** map all the pods present at your site using a dot. Next to the dot, write the number of whales in the pod (could be only one), and if there is a mother/calf pair write (M/C) next to the number, or for a mother/calf/escort group, write (M/C/E). Estimate their distance from you using the *distance estimation sheet* included in your package. Draw lines from you to the whale and write the distance along the line. Be sure to include the elevation of your site in the space provided above. See example provided on the back of this sheet.

Please mail or deliver completed forms to the appropriate Sanctuary office.

- On the day of the Count, Site Leaders will designate 2 volunteers to fill out this form.
- Site Leader will train the volunteers prior to the Count start time (8 a.m.) on how to fill out this form.
- Site Map should be done from 10:30-11:00 a.m. **ONLY.**

Things to Bring

- Wear appropriate clothing / footwear
- Hat / sunglasses
- Sunscreen
- Wrist watch
- Clipboard
- Pen / pencil
- Beach chair / mat
- Binoculars (optional)
- Water and snacks

Helpful Suggestions

- BE SAFE OUT THERE! Safety is a primary concern.
- Conducting the Count
 - Scan the water slowly starting from the left and scanning for behaviors to the right. Once you are at the far right point, begin slowly scanning again from the left.
 - Binoculars are helpful, but may result in missed behaviors due to limited peripheral vision.
- Adult or calf?
 - Remember that calves need to come up to breathe more often than adults do (e.x. 3-5 min.)
 - The blow of an adult humpback can be 10 ft. tall, the blow of a calf would be considerably smaller

Helpful Suggestions

- Regarding the Behavior Sheet

- # of adults and calves actually seen during the 30 min. time increment – NOT the number of sightings (*i.e. if during the 30 min. you know that you saw only 1 whale, however you saw it surface 10 times (10 sightings), that is still only 1 whale*)

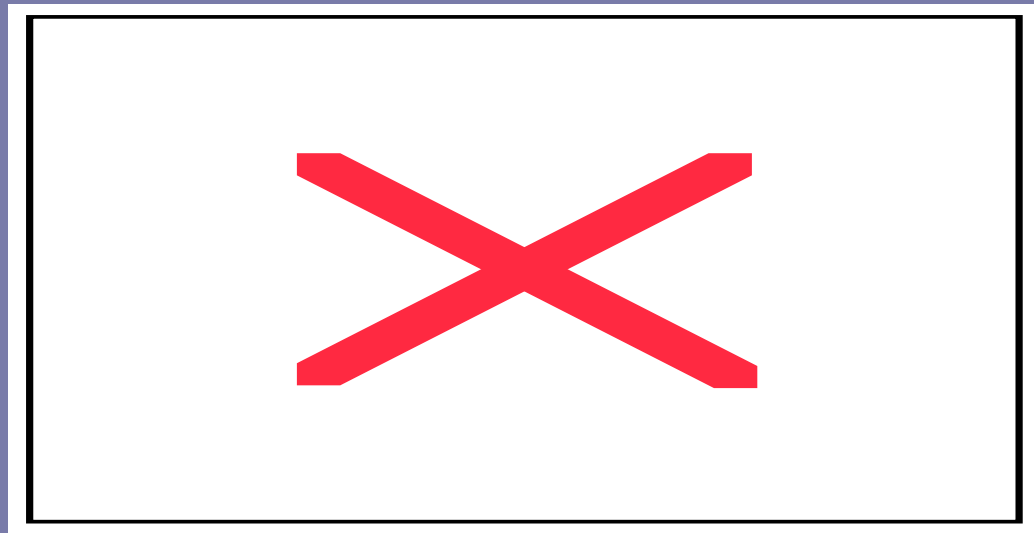
- Behaviors

- Breach – usually results in a very large splash of water, where almost the entire body is visible above water
- Slap – results in smaller splashes of water; try not to confuse a head slap with a breach
- Blow – be careful, sometimes looks like the white cap on a wave
- Fluke-up Dive – indicative of the whale going into a deep dive; you should see the hump of the whale's back and then its flukes breaking the surface

Other Information

- Sanctuary Ocean Count T-shirts are available!
 - Download an order form and mail in with payment or call the Sanctuary office
- Hawaiian Islands Humpback Whale National Marine Sanctuary **website:** www.hawaiihumpbackwhale.noaa.gov
 - Click on “Volunteering”, then “Sanctuary Ocean Count”
- For more information on the Count, download the **Sanctuary Ocean Count Handbook** from the website
- Phone numbers:
 - Big Island: 1-888-55-WHALE
 - Kaua‘i: 246-2860
 - O‘ahu: 379-2656

**Mahalo for your
participation!**



We hope you have a great time!